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## REMARKS

Claims 1-39 are pending in the application. Claims 1 and 28 are herein amended. Applicants kindly request entry of these amendments, as they are believed to place the application in condition for allowance, in conjunction with the enclosed terminal disclaimer.

The Applicants note with appreciation the Examiner's indication of allowability of claims 15-35 and 39.

Claims 1-7, 9-14, 28-31, and 36-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Adefris (U.S. Patent 6,702,650). In addition, claims 1-39 were rejected under nonstatutory obvious-type double patenting as being unpatentable over Bonner (U.S. Patent 7,090,565).

The Applicants have amended claims 1 and 28 to now recite "... an elastic modulus value of 55 GPa or less and a minimum burst speed of 4000 sfpm (20.32 m/s)." The Examiner indicated such subject matter to be allowable over the art of record, including Adefris. In addition, the Applicants are herein providing a terminal disclaimer to obviate the nonstatutory obvious-type double patenting rejection as to Bonner.

As such, the Applicants believe the claims are now in condition for allowance, and respectfully request the Examiner to reconsider and withdraw the rejections.

In addition, the Applicants wish to clarify a few points. With respect to Adefris' intra-composite porosity, Adefris defines the term composite: "Throughout this disclosure, the terms 'abrasive composite', 'abrasive agglomerate', and derivations thereof, are used interchangeably. Each of these terms refers to a plurality of primary abrasive particles bonded together by a first binder matrix to form a unitary particulate mass." (col. 4, lines 5-9). In addition, Adefris distinguishes intra-composite porosity and inter-composite porosity: "Inter-composite porosity, positioned between and among the abrasive composites, is present in the abrasive article. Also present in the abrasive article is intra-composite porosity, which is within the abrasive composites and is positioned between and among the primary abrasive particles." (col. 4, lines 19-24). Thus, Adefris' "intra-composite porosity" is *within* the abrasive agglomerates/composites. It is these abrasive agglomerates/

composites that are then bonded together to form Adefris' three dimensional abrasive article (e.g., see Abstract). Such intra-composite porosity as defined by Adefris will not make the resulting three dimensional article "permeable to fluid flow via channels formed with interconnected porosity" as recited in the Applicants' claims.

With respect to Adefris' sealed pores that become "open" when they reach the external surface of the abrasive tool, the Applicants note the following. Adefris discloses: "The intra-composite porosity extends between and among the primary abrasive particles, and can be open to the external surface of the composite or can be sealed within the composite." (col. 8, lines 3-6). Adefris further discloses: "The inter-composite pores within the abrasive article extend between and among the abrasive composites and any second binder material, and can be open to the external surface of the abrasive article or can be sealed." (col. 12, lines 9-12). In either case of *intra* or *inter*, a sealed pore that is exposed at the external surface of the abrasive tool does not amount to interconnected porosity that enables the composite to be permeable to fluid flow via channels formed with interconnected porosity. Rather, a sealed pore that becomes open at the external surface is merely a dimple on the surface of the tool, and cannot be interconnected with other pores. Otherwise, it would never have been sealed in the first place. Adefris simply fails to disclose a structure of interconnected porosity, let alone a structure of interconnected porosity that can be increased due to thermal-induced migration of bond material as recited in various dependent claims.

Favorable action is solicited. The Examiner is kindly invited to telephone the undersigned attorney should there be any remaining issues.

Respectfully submitted,

/Neil F. Maloney, Reg. No. 42,833/

Neil F. Maloney, Reg. No. 42,833  
Attorney for Applicants  
Phone: 508-795-2555/Fax: 2653

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Saint-Gobain Abrasives, Inc.  
1 New Bond Street, Box Number 15138  
Worcester, Massachusetts 01615-0138

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